Calendar Year 2016 Jupiter Laser Facility Proposal

Title of Proposed Experiment:

Principal Investigator: *Name*
Affiliation
Position
Mailing address
Email address
Telephone number

Tentative Research Team:
Names and affiliations

Requested Laser Platform and Experiment Time (default is 4 weeks): *Titan, Janus or COMET*

Special Requests: e.g. *in Titan, split short-pulse beam, f/10 focusing parabola, gas jet, external magnetic field, required prepulse;* or *in Janus, gas jet, chamber gas fill, prepulse requirements, use of external magnetic fields.*

If Titan: 1ω or 2ω short pulse?

Proposal Title:

Executive Summary
One-paragraph summary of the intent of the experimental, method, and scientific impact.

Scientific Goal and Impact
Explain why your experiment is important. Example questions: Will the data resolve or help resolve an extant scientific or programmatic issue? Is the proposed experiment new or an improvement on previous work? What scientific area is affected? What conditions do you expect to achieve? Is the work necessary development for experiments at other facilities? Is there a secondary goal? Include figures and illustrations for clarity.

Methodology
Explain how the experiment will be performed. How do you expect to reach the desired conditions with what laser configuration using which diagnostics? (Specific laser energies or pulse shapes, detailed chamber layouts, and target specifications are not necessary for the proposal, though they should all be achievable. Contact JLF if you have questions.) Are proposed diagnostics new? Will they provide the sufficient data and the precision necessary to reach the goals laid out in the previous section? Have you performed similar experiments at Jupiter or other facilities? If so, that experience should be cited (*e.g.*, as publications).

Laser Requirements
Briefly describe laser system requirements, especially nonstandard requirements. Nonstandard requirements might include a new pulse shape or an atypical beam configuration (for example, split short-pulse beam or green short-pulse beam in Titan, prepulse levels – low or high, unusual arrangements). Requested configurations may or may not be achievable. Some configurations require several days of facility maintenance to assemble. Questions should be addressed to the JLF Manager, Brent Stuart, stuart3@llnl.gov.

Experiment and Shot Plan
Approximately how many shots will be required? Overall, how to you expect to use the weeks requested?

Hardware
Briefly describe any diagnostic equipment or other hardware you plan to bring into Jupiter. Important: If you expect to bring a laser into JLF, describe its expected characteristics.

Potential Safety Concerns
If you plan on using toxic materials or potentially dangerous chemicals, or if you expect to create a radiation hazard, please provide some specifics. (Production of low-level, short-lived isotopes typical of high-intensity shots is not a concern, nor are most common metal and plastic target materials.) If you plan to introduce high-voltage equipment or employ strong magnetic fields, briefly describe.

Experience
Very briefly describe the experience of the experimental team leader (who may or may not be the proposal PI) and principal team members using high-energy or high-intensity lasers if they are new to JLF.

References

Curriculum vitae

Brief CVs for the PI, experiment team leader and, possibly, principal team members. These should be limited to two pages. each.

Submission Instructions. Please name the proposal document "*PI*_JLF16_*Platform*", where *PI* is the last name of the submitter and *Platform* is the requested laser (Titan, Janus, or COMET). If requesting more than one laser platform, use "Multiple" for *Platform*. If the same PI submits more than one proposal, please create unique filenames. Send the completed proposal as a *pdf* document to Robert Cauble cauble@llnl.gov cc'd to Beth Mariotti mariotti2@llnl.gov by 22 August 2015.